Roland

Adobe PostScript 3

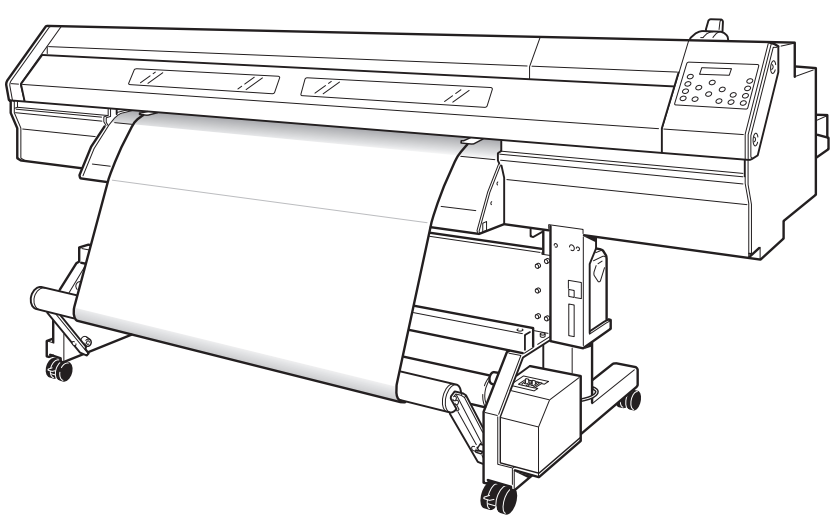
XC-540MT

SPECIAL COLOR INK GUIDE

(Metallic Silver & White)

When using metallic silver ink and white ink, be sure to read this first.

This document describes the characteristics of special color inks (white ink and metallic silver ink) used with XC-540MT, important notes, maintenance, and printing method using these inks. For other matters, refer to the XC-540/XC-540MT Setup Guide and the XC-540/XC-540MT User's Manual.



Roland DG Corporation

Thank you very much for purchasing this product.

- To ensure correct and safe usage with a full understanding of this product's performance, please be sure to read through this manual completely and store it in a safe location.
- Unauthorized copying or transferal, in whole or in part, of this manual is prohibited.
- The contents of this operation manual and the specifications of this product are subject to change without notice.
- The operation manual and the product have been prepared and tested as much as possible. If you find any misprint or error, please inform us.
- Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur through use of this product, regardless of any failure to perform on the part of this product.
- Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur with respect to any article made using this product.

Contents

Chapter 1 Getting Started 3

1-1 What This Document Assumes and Related Manuals 4
- What This Document Assumes 4
- Related Manuals 4
- VersaWorks Online 4

1-2 Before Starting Operations 5
- Important: Characteristics of Inks and Important Notes 5
- Before Starting the Day's Work 5

Chapter 2 Getting Ready 7

2-1 Preparing VersaWorks 8
- Starting VersaWorks 8
- Creating a Folder for Saving PS Files 8

2-2 Creating Printing Data 9
- Basic Approach for Creating Printing Data 9
- Creating Data for Printing 9

2-3 Printer Preparations 15
- Making the Printer Settings and Loading Media 15

Chapter 3 Printing 17

3-1 Using the Metallic Silver/CMYK Color Ink 18
- Printing With Metallic Silver/CMYK Color (Both or Individually) 18

3-2 Using Metallic Silver/White/CMYK Color Inks 22
- Printing in the Sequence of White and Then Metallic Silver/CMYK Color 22
- Printing in the Sequence of Metallic Silver/CMYK Color and Then White 28
- Printing With Metallic Silver/White/CMYK Color in a Single Pass 34

Chapter 4 Maintenance and Important Notice When Printing 39

4-1 Maintenance 40
- Message for Ink Circulation 40
- When Dot Drop-out Etc. Cannot be Corrected 40

4-2 Important Notes on Printing 42
- When Performing Dual-pass Printing 42
- When Using Transparent Media 43

Copyright and property of this Software and this manual belong to Roland DG Corp. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any from or by any means, electronic, mechanical, photocopy, recording or otherwise, without the prior written permission of the publisher.
VersaWorks is a registered trademark of Roland DG Corp.
Windows is a registered trademarks or trademarks of Microsoft® Corporation in the United States and/or other countries.
Pentium are registered trademarks of Intel Corporation in the United States.
Macintosh is a registered trademark of Apple Inc.
Adobe, the Adobe logo, PostScript, PostScript 3, and Illustrator are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. ©2007 Adobe Systems Incorporated. All rights reserved.
Other company names and product names are trademarks or registered trademarks of their respective holders.

Copyright © 2009 Roland DG Corporation

http://www.rolanddg.com/

Chapter 1
Getting Started

1-1 What This Document Assumes and Related Manuals.. 4
What This Document Assumes 4
Related Manuals 4
VersaWorks Online 4
1-2 Before Starting Operations 5
Important: Characteristics of Inks and Important Notes .. 5
Before Starting the Day's Work 5

1-1 What This Document Assumes and Related Manuals

What This Document Assumes

Before performing any operations described in this guide, make sure that all the following preparations are complete.

- Assembling and installing the XC-540MT unit
- Installing VersaWorks on your computer, and connecting the computer to the XC-540MT via a network

Related Manuals

Read the following documentation for information about setting up the XC-540MT unit and VersaWorks.

(1) Setup Guide

This manual covers details about how to use the XC-540MT, including how to set up the printer and where to locate the printer, etc. Be sure to read this manual.

(2) User's Manual

This manual describes operation methods in detail. After you've read the XC-540MT Setup Guide, be sure to read this manual.

(3) VersaWorks Quick Start Guide

This manual explains basic operations of VersaWorks, including how to set up the program. Be sure to read Chapter 1 of this manual and make necessary setups on your computer. It is also recommended to read Chapter 2 of this manual and become familiar with how to use this program.

VersaWorks Online

This document describes the important notes for using the metallic silver ink and white ink as well as the basic printing method. You can get the latest information about Roland VersaWorks and the information on printing methods requiring more complex settings by viewing VersaWorks Online.
If you want to learn more about the features of Roland VersaWorks, or if you want to use metallic silver ink and white ink more effectively, be sure to visit VersaWorks Online.
URL: http://dg4.roland.co.jp/en/RVW2forWeb/index.html

1-2 Before Starting Operations

Important: Characteristics of Inks and Important Notes

The usage and handling of white ink and metallic silver ink involve some important considerations that do not apply to ink of other colors.
Be sure to familiarize yourself with the characteristics of inks before you use it.

White ink and Metallic Silver ink settle and separate.

- If it is allowed to stand, the precipitated material may solidify and cause clogging of the print heads or other malfunction. Be sure to observe the cautions in this manual.

Maintenance must be performed.

- Always keep the main power switched on. If the main power is switched off, the automatic maintenance function stops working, and may result in malfunction.
- We recommend operating the printer at least once a week.
- If the printer is left unused for a long period of time, ink precipitation may occur, resulting in an incorrect ink discharge such as occurrence of dot drop-out. In such cases, the precipitated and solidified ink needs to be discharged. This work requires two SOL INK cleaning cartridges. For how to perform the work, refer to the description below.

☞ P. 40, "When Dot Drop-out etc. Cannot be Corrected"

Drying inks

- After output, allow the ink to dry sufficiently. Note that white ink and metallic silver ink in particular require printing at a high density, and so are more difficult to dry than CMYK inks.
- Use an auxiliary drying unit (DU-540).

We strongly recommend performing lamination.

- Depending on conditions, the weatherability of metallic silver ink and white ink may be inferior to that of CMYK inks. Therefore, laminating is strongly recommended.
- Maintenance requires two SOL INK cleaning cartridges, so be sure to have these on hand.

Before Starting the Day's Work

- **Remove just the white and metallic silver ink cartridges, shake them gently, then reinsert them.**
- **The cyan, magenta, yellow, and black ink cartridges do not need to be shaken every day, but new cartridges for these colors should be shaken when you install them.**

The ingredients in white and metallic silver ink tend to settle. Each day, before starting the day's operations, be sure to carry out the above steps. Allowing the ink to stand without carrying out these steps can cause the settled material to harden, resulting in malfunction or other problems.

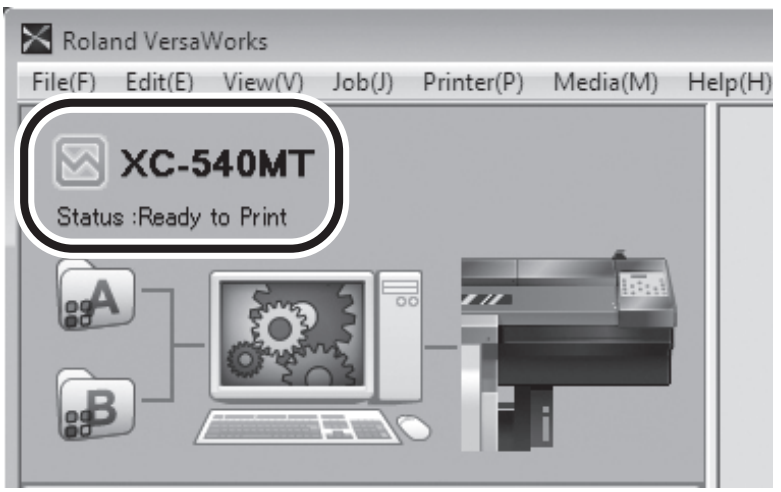
Chapter 2
Getting Ready

2-1 Preparing VersaWorks 8
Starting VersaWorks 8
Creating a Folder for Saving PS Files 8
2-2 Creating Printing Data 9
Basic Approach for Creating Printing Data 9
Creating Data for Printing 9
2-3 Printer Preparations 15
Making the Printer Settings and Loading Media 15

2-1 Preparing VersaWorks

Starting VersaWorks

On the computer you're using, start VersaWorks. For information on how to start the program, see the Roland VersaWorks Quick Start Guide. After starting the program, go to the upper left of the main screen and check to make sure that "Model (or Nickname) of Your Printer" is displayed, and that "Status" is set to "Ready to Print."



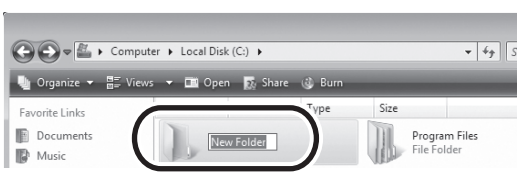
Creating a Folder for Saving PS Files

Before you actually print an image you draw using application software such as Adobe Illustrator, it is necessary to save the image as a PS file (s). And then, you can print the image by loading the PS file (s) on VersaWorks. Because of this, you should create a folder for saving PS files in advance. It is recommended to locate the folder in the root directory on your computer's local disk.

Procedure

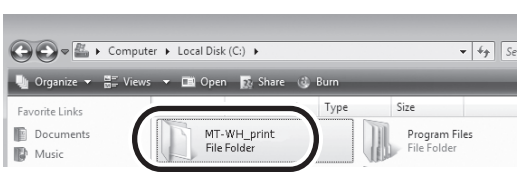
❶ **Open [Computer] (or [My Computer]), and then open [Local Disk (C:)].**

❷



On the [Organize] menu, click [New Folder]. (Or on the [File] menu, click [New], and then click [Folder].)

❸



Enter the name for the folder, and then press the Enter key.
Here you name "MT-WH_print", for example.

2-2 Creating Printing Data

Basic Approach for Creating Printing Data

When Using Metallic Silver Ink

When you print using metallic silver ink, you can create the printing data according to the two methods below.

- **Specify the spot color so as to use only the metallic silver ink.**
  Apply the spot color named "RDG_MetallicSilver" to the areas you want to print using the metallic silver ink.
- **Use the exclusive metallic color special colors library.**
  From the exclusive metallic color special colors library, select the metallic color to be used which is the combination color of CMYK ink and metallic silver ink. 12 metallic colors are provided as default.

When Using White Ink

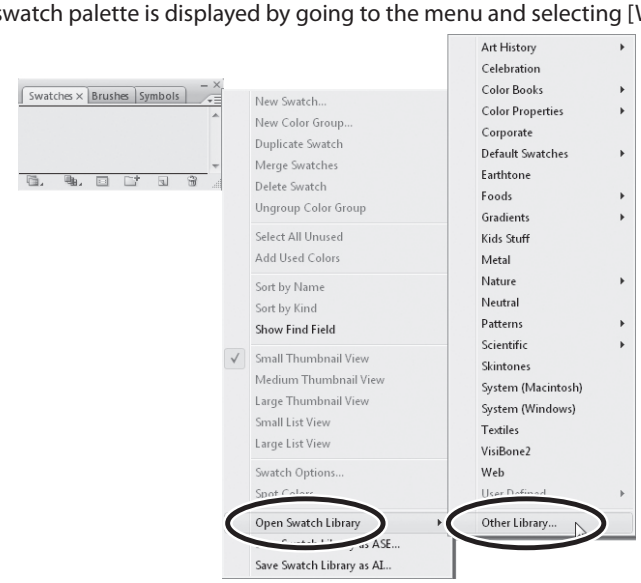
Apply the spot color named "RDG_WHITE" to the areas you want to print using the white ink.

Creating Data for Printing

Create the data for printing using the metallic silver ink and white ink.
The program used to create the printing data is Adobe Illustrator CS3. For detailed information on drawing methods and how to work with palettes, refer to the documentation or online help for Adobe Illustrator CS3. If you're using another version of Adobe Illustrator, operations may be somewhat different from those explained here.

1. Open the exclusive swatch library.

❶ **At the swatch palette menu, select [Open Swatch Library], then [Other Libraries].**
The "Select Library" window appears.
NOTE: The swatch palette is displayed by going to the menu and selecting [Window], then [Swatch].

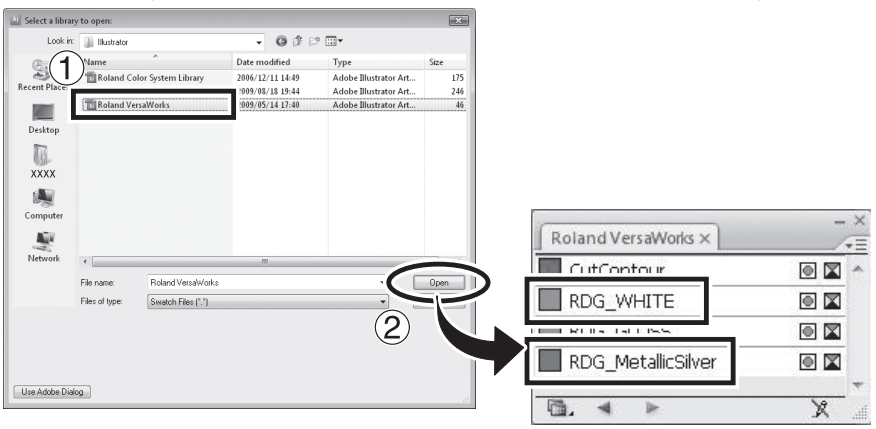


❷ **①Open folder in the order of [Computer] (or [My Computer]) → [Local Disk (C:)] → [Program Files] → [Roland VersaWorks] → [Swatch] → [Illustrator], then select "Roland VersaWorks.ai."**

Depending on the settings of your computer, the extension ".ai" might not be shown.

②Click [Open].

The swatch library containing "RDG_MetallicSilver" and "RDG_WHITE" is displayed.

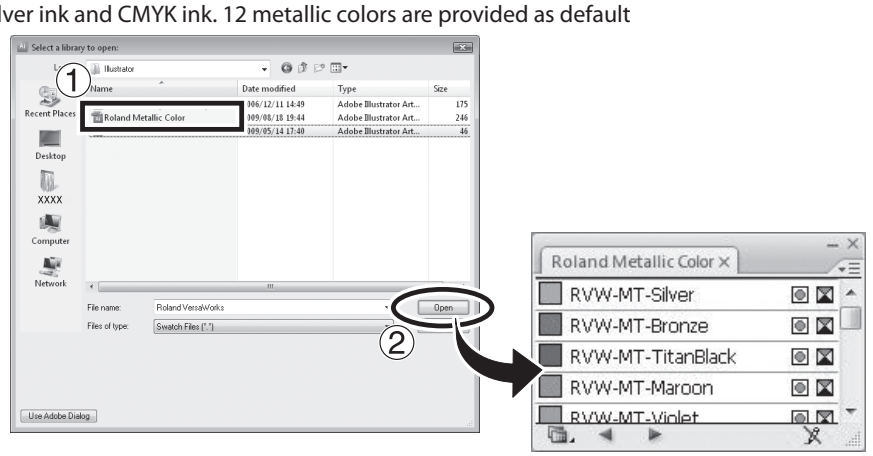


❸ **①Open the same folders as in step ❷, then select "Roland Metallic Color.ai."**

Depending on the settings of your computer, the extension ".ai" might not be shown

②Click [Open].

The swatch library is displayed which is containing the "metallic color" created by mixing the metallic silver ink and CMYK ink. 12 metallic colors are provided as default



Tips!

By saving the ".ai" file selected in steps ❷ and ❸ into the folder below, you can register each swatch library to the Adobe Illustrator's library.

C:\Program Files\Adobe\Adobe Illustrator CS3\Preset\Swatch

("C" is the name of your computer's local disk.)

Once the registration is performed, you can open the library directly from the swatch palette menu, eliminating the need to search the file every time you start Adobe Illustrator.

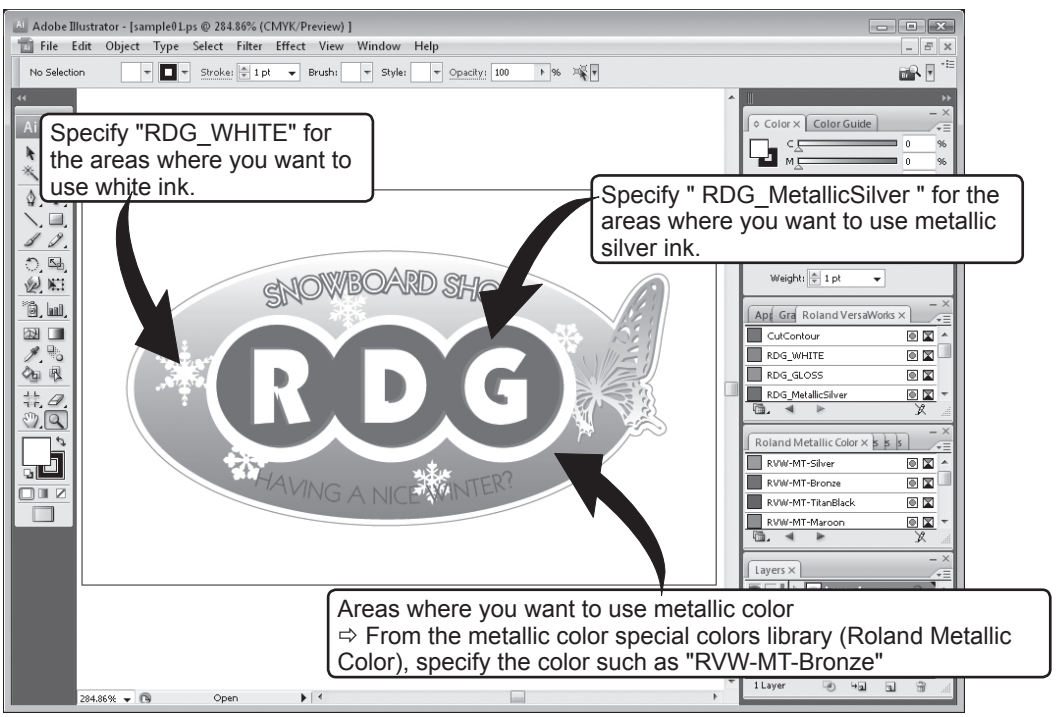
2. Create the illustration, and specify the spot color that matches the color you want to print.

❶ Create the illustration.

Be sure to draw the illustration in the CMYK mode.

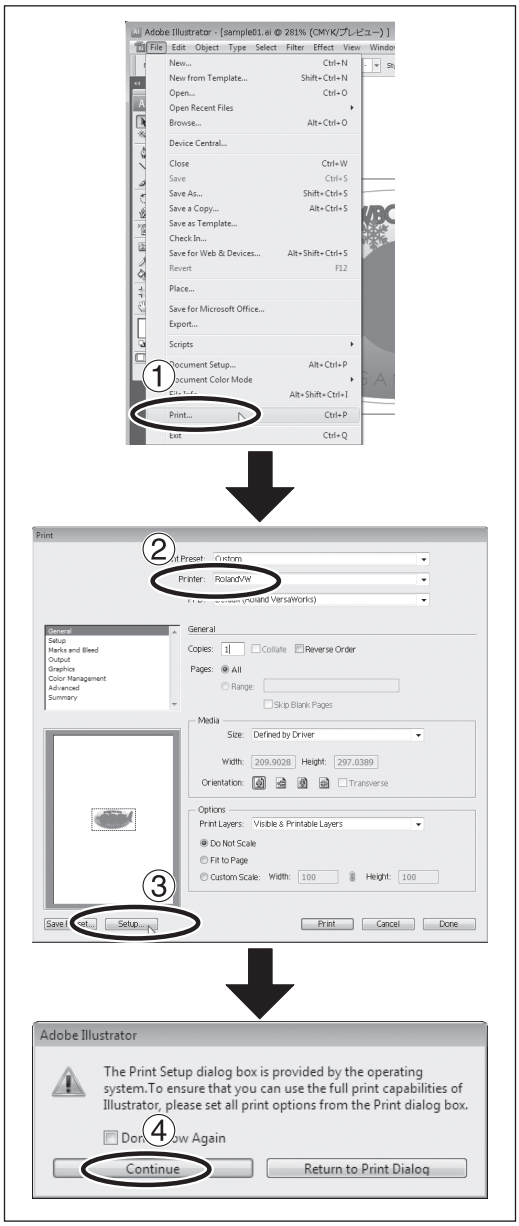
❷ Specify each spot color that matches the color you want to print.

Desired ink or color	Spot color name
Metallic silver ink	**RDG_MetallicSilver**
White ink	**RDG_WHITE**
Metallic color (Metallic silver/CMYK combination color)	**RVW-MT-Silver, RVW-MT-Bronze, RVW-MT-TitanBlack, etc. (Total of 12 colors)**


Specify "RDG_WHITE" for the areas where you want to use white ink.
Specify " RDG_MetallicSilver " for the areas where you want to use metallic silver ink.
Areas where you want to use metallic color
⇨ From the metallic color special colors library (Roland Metallic Color), specify the color such as "RVW-MT-Bronze"

3. Create the PS (PostScript) file.

❶



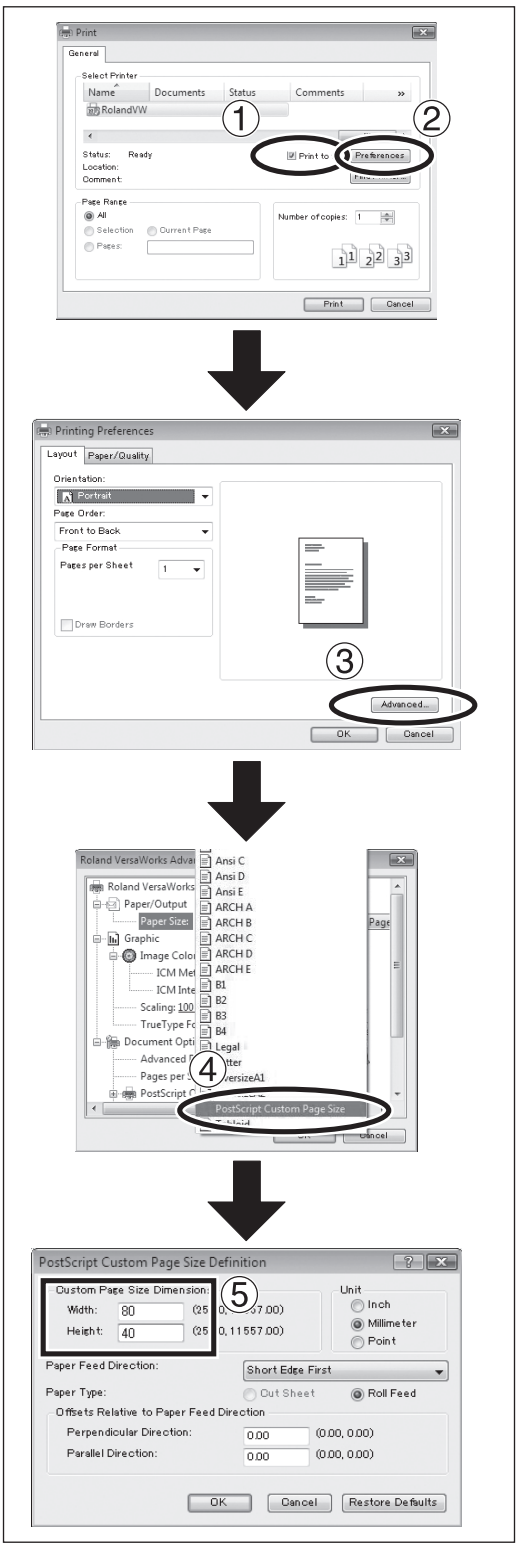
①Select [Print] from the [File] menu.

②Select [Roland VW].

③Click [Setup].

④Click [Continue].

❷



①Turn on the [Print to file] option.

②Click [Preferences].

③Click [Advanced] in the [Layout] tab.
For Windows 2000: In the "Print" dialog box (the window at the very top of this page), go to the "Layout" tab and click [Advanced].

④Click the down arrow to the right of the [Paper Size] box, and then click [PostScript Custom Page Size] from the list that appears.

⑤For "Custom Page Size Definition," enter the values in the "Width" and "Height" fields.
Enter values for the same size as the illustration you created in step *2*.

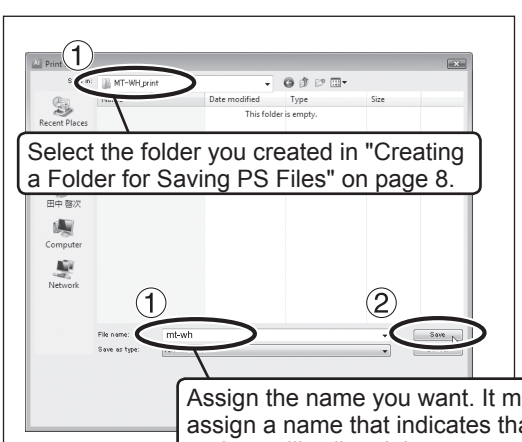
❸ **Click [OK] three times to close the "PostScript Custom Page Size Definition," "Roland VersaWorks Advanced Options," and "Printing Preferences" dialog boxes.**
The "Print" dialog box returns.

❹

①Click [Print].

②Click [Print].

❺


1
MT-WH_print
Date modified
Type
Size
This folder is empty.
Recent Places
Computer
Network
Select the folder you created in "Creating a Folder for Saving PS Files" on page 8.
1
2
File name: mt-wh
Save as type:
Save
Assign the name you want. It may be a good idea to assign a name that indicates that the file uses white and metallic silver ink.

①Specify the destination and file name for saving, then save the file.
Example: " C:\MT-WH_print " for the folder to save to, and " mt-wh.ps " as the file name

②Click [Save].
The CMYK layer of the image is saved as a PS file.

❻ **Open the folder you saved to and make sure the file has been created.**

2-3 Printer Preparations

Making the Printer Settings and Loading Media

When Using Transparent Media

When you're using transparent media, make the necessary printing settings on the printer and load the media accordingly.

Procedure

❶ **Press MENU and make the following settings.**
[EDGE DETECTION] to "DISABLE."

❷ **Load transparent media into the printer.**
➢ When the media you are loading into the printer warps or partially floats from the platen, load it into the printer so that its front end goes about 20 cm (8 in.) from the starting edge of the print area.
➢ Be sure to use the media clamps when you load media.

When Using Media Other Than Transparent Media

Load the media using the method described in the XC-540/XC-540MT User's Manual.

Chapter 3
Printing

3-1 Using the Metallic Silver/CMYK Color Ink..... 18
Printing With Metallic Silver/CMYK Color (Both or Individually)..... 18
3-2 Using Metallic Silver/White/CMYK Color Inks..... 22
Printing in the Sequence of White and Then Metallic Silver/CMYK Color 22
Printing in the Sequence of Metallic Silver/CMYK Color and Then White 28
Printing With Metallic Silver/White/CMYK Color in a Single Pass..... 34

3-1 Using the Metallic Silver/CMYK Color Ink

Printing With Metallic Silver/CMYK Color (Both or Individually)

This section describes how to perform either of the printing methods below.

- **Using metallic silver ink and CMYK ink (printing all the metallic colors such as RDG_MetallicSilver and RVW-MT-Bronze as well as CMYK colors)**
- **Using metallic silver ink only (printing RDG_MetallicSilver only)**
- **Using CMYK ink only**

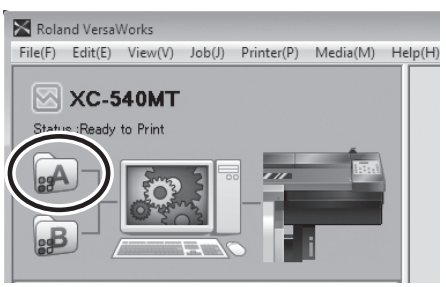
In order to use the metallic silver ink, printing data containing metallic colors such as "RDG_MetallicSilver" and "RVW-MT-Bronze" must be used.

☞ P. 9, “Creating Printing Data”

Procedure

❶ **Make sure that you have finished making the preparations for VersaWorks, creating the printing data, and getting the printer ready (☞ page 7, "Chapter 2 Getting Ready").**

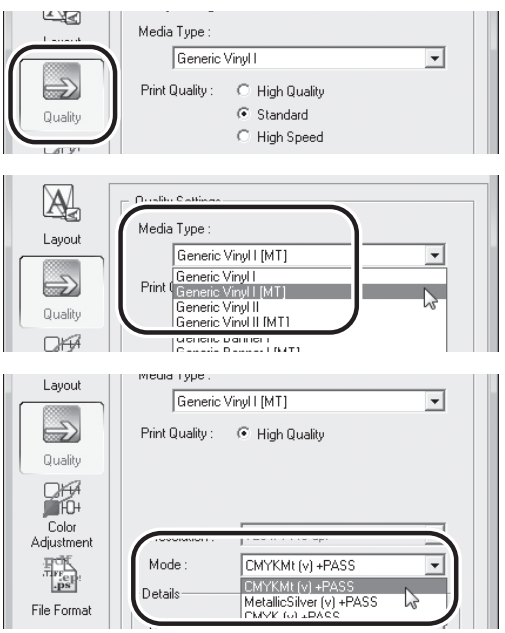
❷



Double-click .

"Queue A Properties" window appears.

❸



Click .

For [Media Type], select names with [MT] attached such as "Generic Vinyl 1 [MT]".

Make the selection that matches the media to be used. Selecting an item attached with [MT] enables you to choose the print mode that can use the metallic silver ink.

With [Mode], select the print mode.

CMYKMt (v) +xxx

⇨This prints with all the metallic colors such as RDG_MetallicSilver and RVW-MT-Bronze as well as CMYK colors.

MetallicSilver (v) +xxx

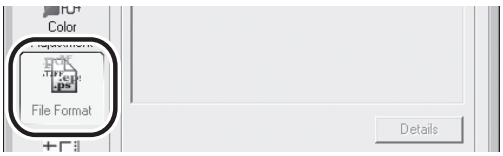
⇨This prints with RDG_MetallicSilver only.

CMYK (v) +xxx

⇨This prints with CMYK ink only.

"xxx" indicates "+PASS" and others.

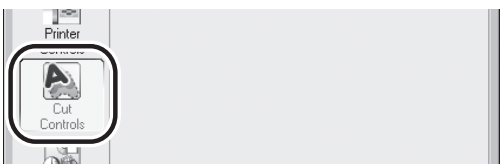
❹



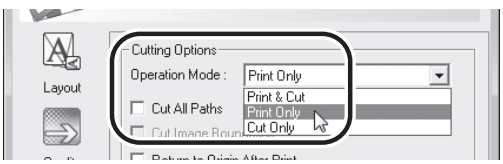
Click .

Turn on the [Convert Spot Color] option.

❺



Click .

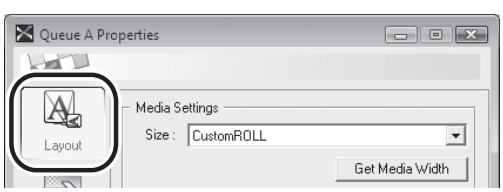


In [Operation Mode], select "Print Only."

Turn off the [Return to Origin After Print] option.

Because the metallic silver ink is difficult to dry, make the setting to prevent the media from being returned to origin immediately after the printing.

When You Want to Display the Side Opposite the Printed Surface by Using Clear Film.



Click .

Turn on the [Mirror] option.

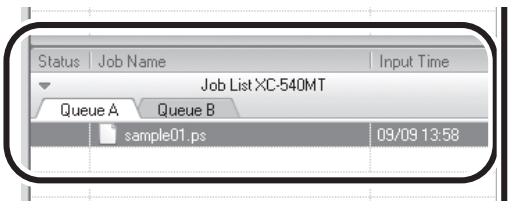
When the printing data with mirror image is prepared beforehand, you do not need to turn on this option.

* This section only described the settings that are necessary for the use of the metallic silver ink. For other settings, refer to the online help provided for VersaWorks. When you want to use the white ink, refer to P. 22, "Using Metallic Silver/White/CMYK Color Inks".

❻

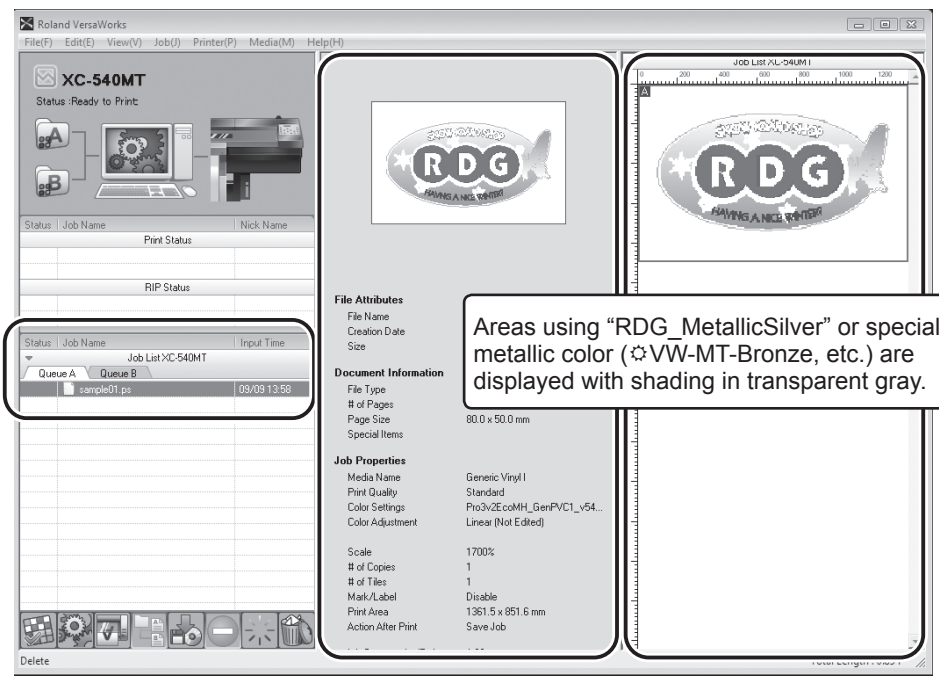
Click [OK] to close the “Queue A Properties” window.

❼

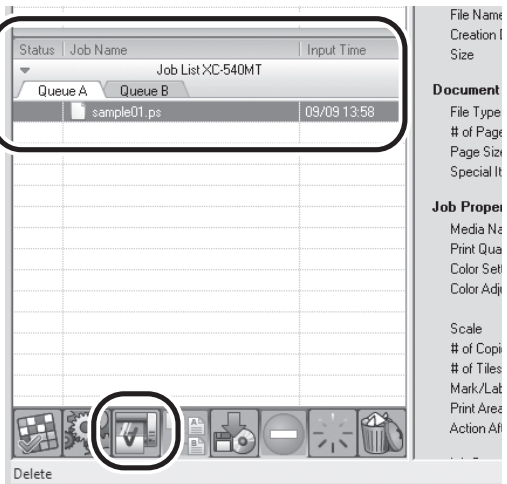


Go to “Job List” and click the “Queue A” tab, and drag the printing data to the queue A job list.

NOTE: The contents of the data are displayed in the preview window, and the layout on the media is displayed in the layout window.



❽



Select the print job in the job list, then click .

Printing will be started.

Tips!

After printing, allow the ink to dry sufficiently. We strongly recommend performing lamination.

Tips!

When continuing printing using another data that uses metallic silver and CMYK colors, repeat steps ❼ and ❽. Also, if you want to modify detailed settings for each job, it will be convenient to perform modifications in the "Job Setting" window (displayed by double-clicking the print job in the job list).

3-2 Using Metallic Silver/White/CMYK Color Inks

Printing in the Sequence of White and Then Metallic Silver/CMYK Color

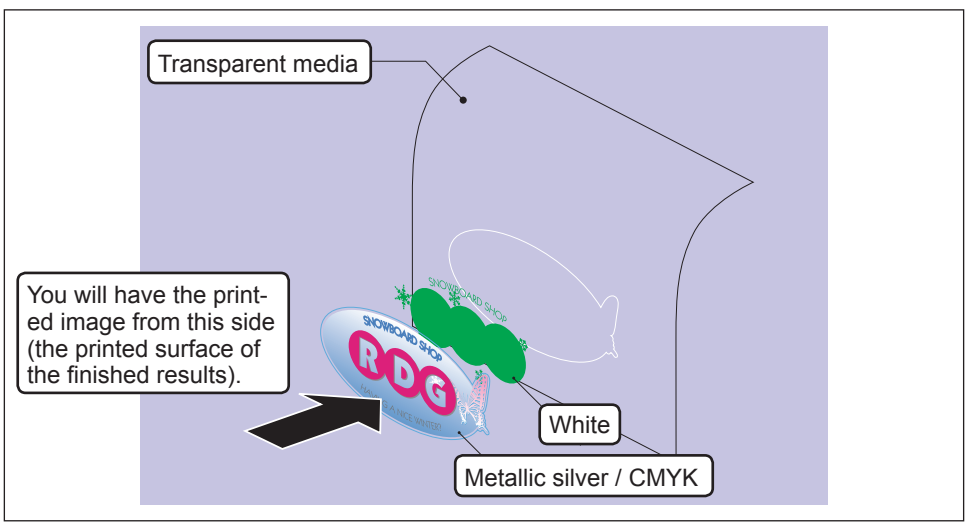
This section describes how to perform printing in the sequence of white and then metallic silver/CMYK color. After performing printing using white ink and allowing the ink to dry for a predetermined period, the media is pulled back once, and then the fill overprinting is performed using metallic silver and CMYK ink.
The printing data containing metallic colors such as "RDG_MetallicSilver" and "RVW-MT-Bronze" must be used in order to use the metallic silver ink, and the printing data containing "RDG_WHITE" must be used in order to use the white ink.

☞ P. 9, "Creating Printing Data"

IMPORTANT!

This printing method involves some important notes for avoiding contamination on the printed surface. Be sure to refer to page 42, "When Performing Dual-pass Printing".

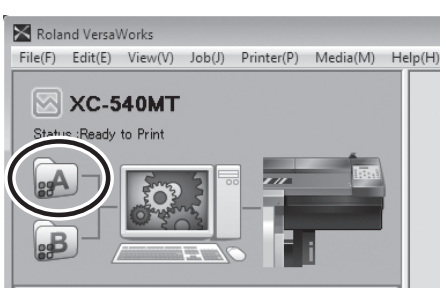
Image of overprinting in the sequence of white and then metallic silver/CMYK


Transparent media
You will have the print-ed image from this side (the printed surface of the finished results).
White
Metallic silver / CMYK

1. Printing With White Ink Only

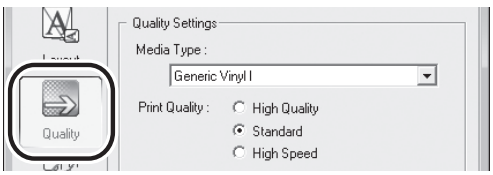
❶ **Make sure that you have finished making the preparations for VersaWorks, creating the printing data, and getting the printer ready (☞ p. 9, "Chapter 2 Getting Ready").**

❷

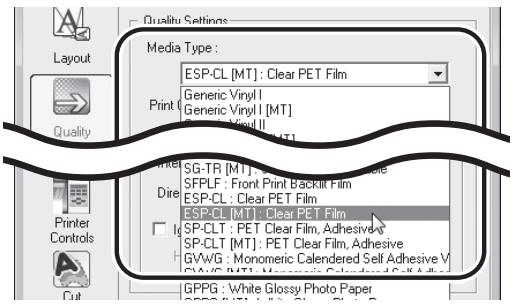


Double-click **.**
"Queue A Properties" window appears.

❸



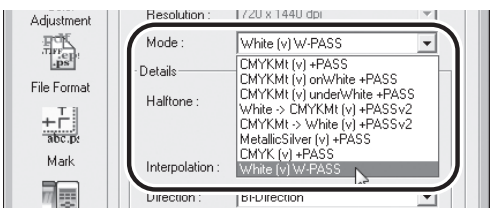
Click .


Layout
Quality
Printer Controls
Media Type :
ESP-CL [MT] : Clear PET Film
Generic Vinyl I
Generic Vinyl I [MT]
SFPLF : Front Print Backlit Film
ESP-CL : Clear PET Film
ESP-CL [MT] : Clear PET Film
SP-CLT : PET Clear Film, Adhesive
SP-CLT [MT] : PET Clear Film, Adhesive
GPPG : White Glossy Photo Paper

For [Media Type], select "xxx[MT]: Clear Film" or "xxx[MT]: Clear Film, Adhesive."

* "xxx" indicates "ESP-CL" and others.

When not using metallic silver ink, you can select "xxx: Clear Film" or "xxx: Clear Film, Adhesive."

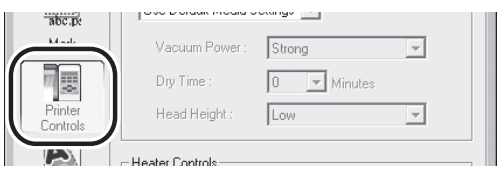


With [Mode], select the print mode "White (v) +xxx."

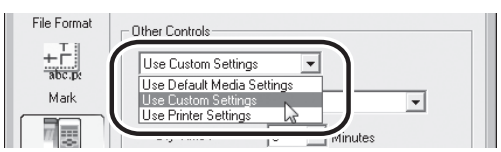
This prints with RDG_WHITE only.

* "xxx" indicates "W-PASS" and others.

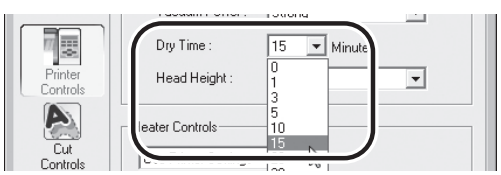
❹



Click .



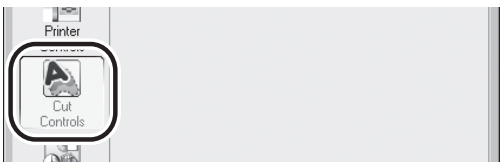
With [Other Controls], select "User Custom Settings."



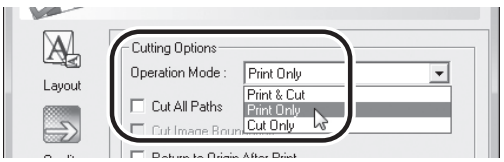
For [Dry Time], select "15 minutes."

This is a suggested setting for when using an auxiliary drying unit (the DU-540).

❺



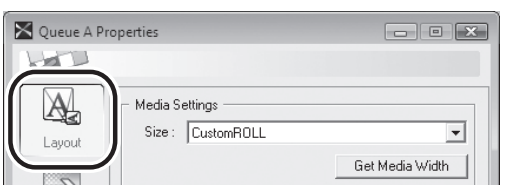
Click .



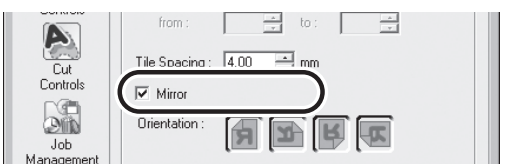
In [Operation Mode], select "Print Only."

Turn on the [Return to Origin After Print] option.

When You Want to Display the Side Opposite the Printed Surface



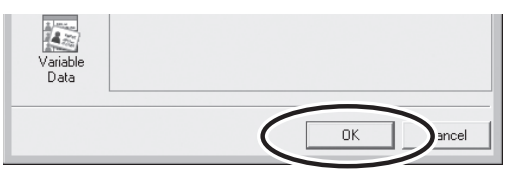
Click .



Turn on the [Mirror] option.
When the printing data with mirror image is prepared beforehand, you do not need to turn on this option.

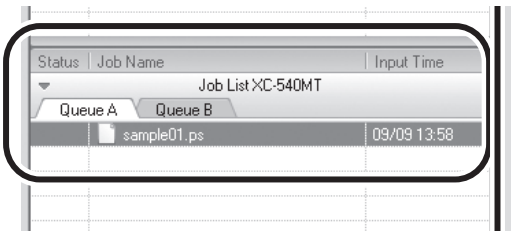
NOTE: This section only described the settings that are necessary for the use of the white ink. For other settings, refer to the online help provided for VersaWorks.

❻



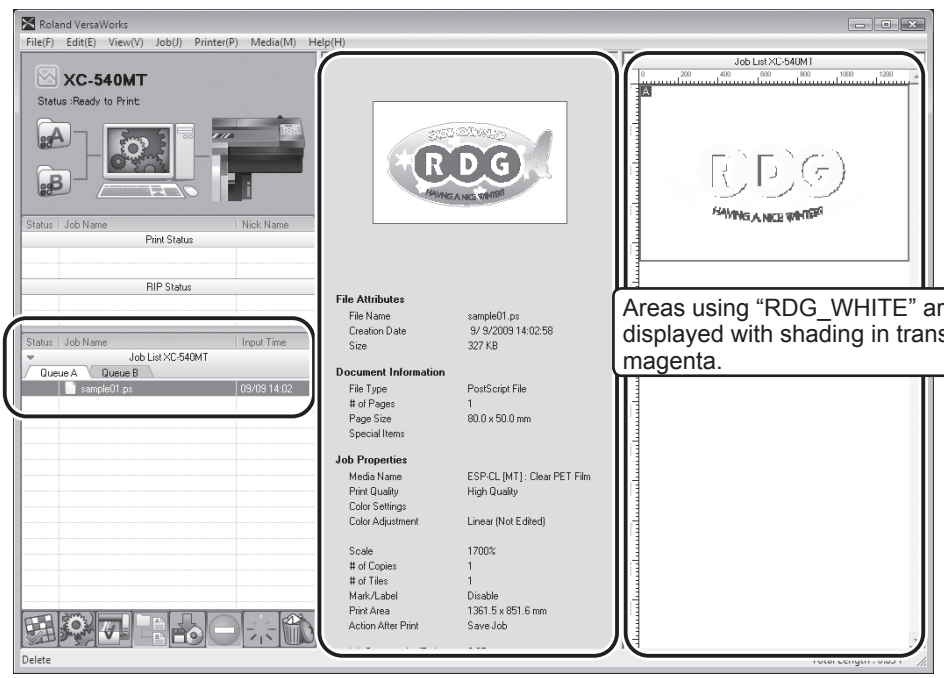
Click [OK] to close the "Queue A Properties" window.

❼

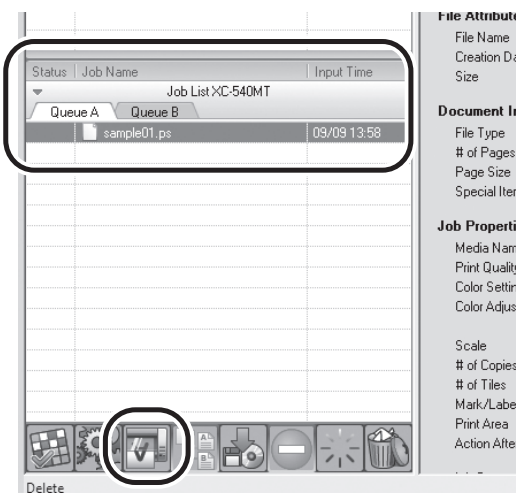


Go to "Job List" and click the "Queue A" tab, and drag the printing data to the queue A job list.

The contents of the data are displayed in the preview window, and the layout on the media is displayed in the layout window.



❽



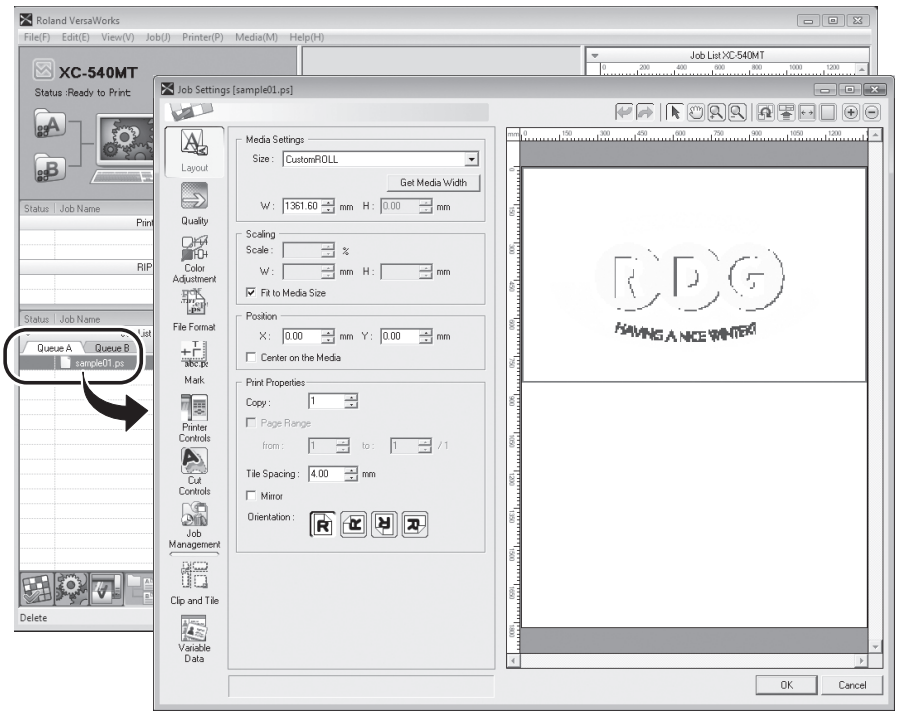
Select the print job in the job list, then click .

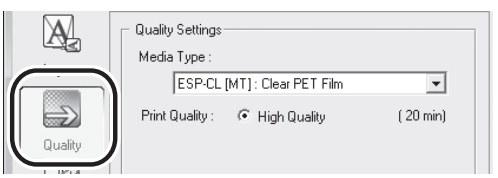
Printing will be started.

After printing and dry time, the media is pulled back. Continue printing of areas using metallic silver and CMYK colors.

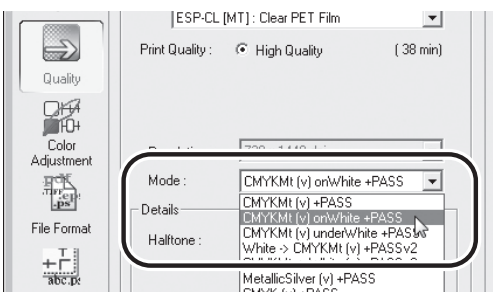
2. Printing With Metallic Silver/CMYK Color

❶ **Double-click the print job that was used in the step *1*.**
The "Job Setting" window appears.



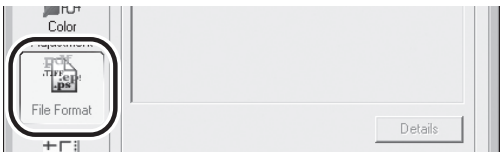
❷ 

Click .



With [Mode], select the print mode " CMYKMt (v) onWhite +xxx."
This prints the areas where metallic color, such as RDG_MetallicSilver and RVW-MT-Bronze, and CMYK colors are specified.
* "xxx" indicates "+PASS" and others.

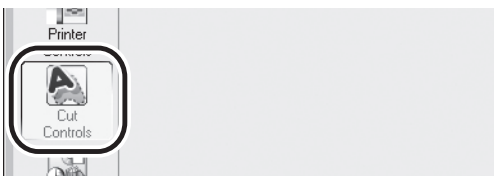
❸



Click .

Turn on the [Convert Spot Color] option.

❹



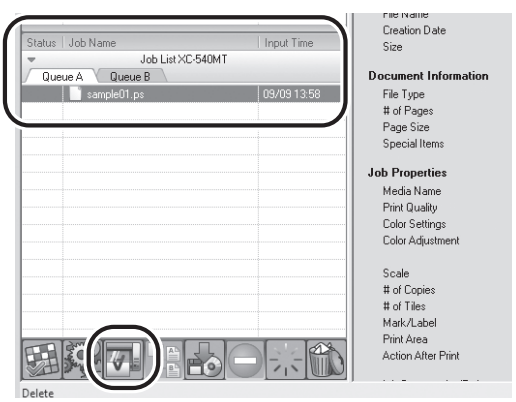
Click .

Turn off the [Return to Origin After Print] option.

❺

Click [OK] to close the "Job Setting" window.

❻



Select the print job in the job list, then click .
Printing will be started.

Tips!

After printing, allow the ink to dry sufficiently. We strongly recommend performing lamination.

Tips!

When continuing printing using another data that uses metallic silver, white, and CMYK colors, repeat steps on and after *1.*-❼. Also, if you want to modify detailed settings for each job, it will be convenient to perform modifications in the "Job Setting" window (displayed by double-clicking the print job in the job

Printing in the Sequence of Metallic Silver/CMYK Color and Then White

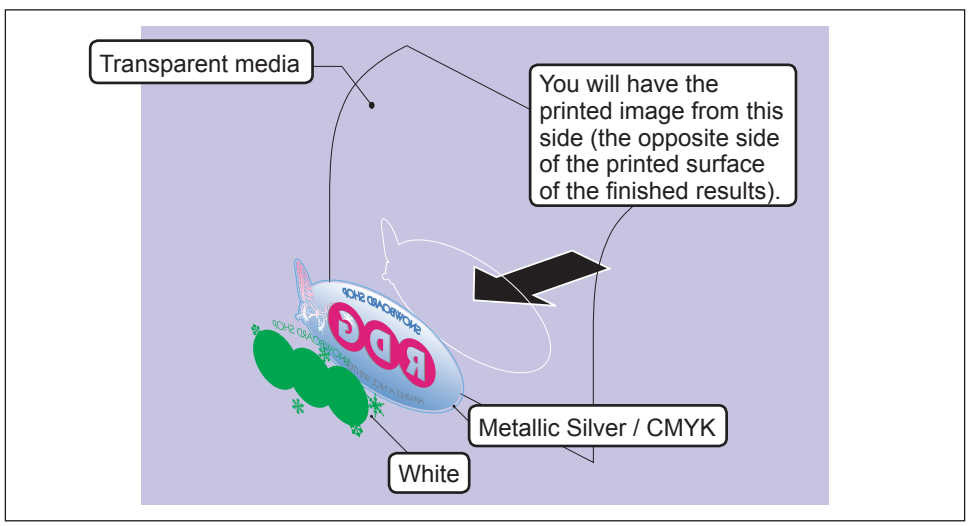
This section describes how to perform printing in the sequence of metallic silver/CMYK Color and then white. After performing printing using metallic silver and CMYK ink and allowing the ink to dry for predetermined period, the media is pulled back once, and then the fill overprinting is performed using white ink.
The printing data containing metallic colors such as "RDG_MetallicSilver" and "RVW-MT-Bronze" must be used in order to use the metallic silver ink, and the printing data containing "RDG_WHITE" must be used in order to use the white ink.

☞ P. 9, "Creating Printing Data"

IMPORTANT!

This printing method involves some important notes for avoiding contamination on the printed surface. Be sure to refer to page 42, "When Performing Dual-pass Printing".

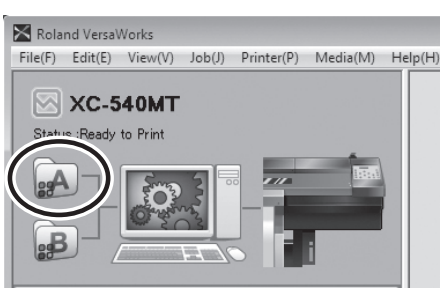
Image of overprinting in the sequence of metallic silver/CMYK and then white.


Transparent media
You will have the printed image from this side (the opposite side of the printed surface of the finished results).
Metallic Silver / CMYK
White

1. Printing With Metallic Silver/CMYK Color (Both or Individually)

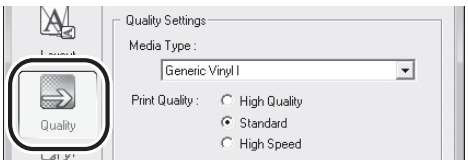
❶ **Make sure that you have finished making the preparations for VersaWorks, creating the printing data, and getting the printer ready (☞ p. 9, "Chapter 2 Getting Ready").**

❷

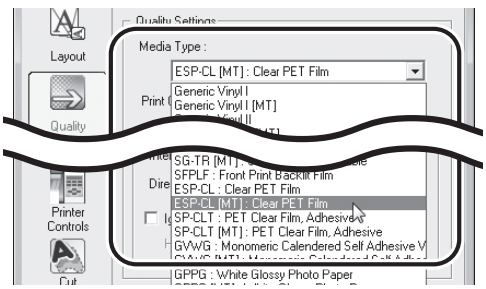


Double-click **.**
"Queue A Properties" window appears.

❸



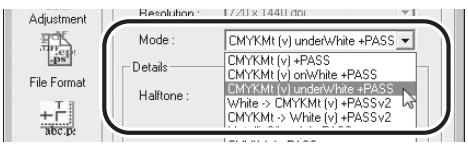
Click .


Layout
Quality
Printer Controls
Cut
Media Type :
ESP-CL [MT] : Clear PET Film
Generic Vinyl I
Generic Vinyl I [MT]
SG-TR [MT]
SFPLF : Front Print Backlit Film
ESP-CL : Clear PET Film
ESP-CL [MT] : Clear PET Film
SP-CLT : PET Clear Film, Adhesive
SP-CLT [MT] : PET Clear Film, Adhesive
GVWG : Monomeric Calendered Self Adhesive V
GPPG : White Glossy Photo Paper

For [Media Type], select "xxx[MT]: Clear Film" or "xxx[MT]: Clear Film, Adhesive."

* "xxx" indicates "ESP-CL" and others.

When not using metallic silver ink, you can select "xxx: Clear Film" or "xxx: Clear Film, Adhesive."

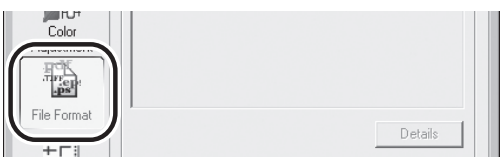


With [Mode], select the print mode " CMYKMt (v) underWhite +xxx."

This prints the areas where metallic color, such as RDG_MetallicSilver and RVW-MT-Bronze, and CMYK colors are specified.

* "xxx" indicates "+PASS" and others.

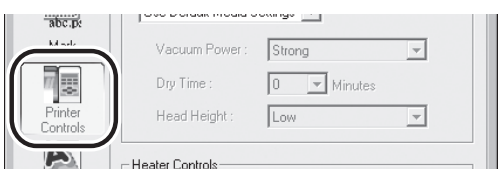
❹



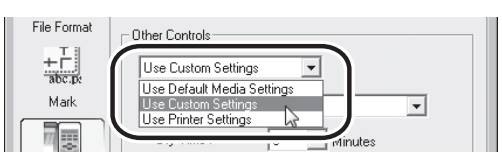
Click .

Turn on the [Convert Spot Color] option.

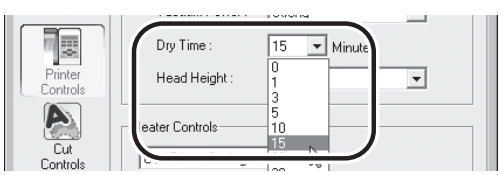
❺



Click .



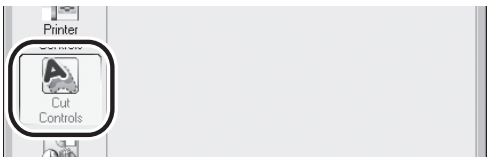
With [Other Controls], select "User Custom Settings."



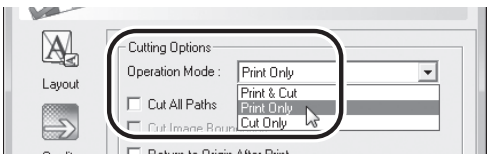
For [Dry Time], select "15 minutes."

This is a suggested setting for when using an auxiliary drying unit (the DU-540).

❻



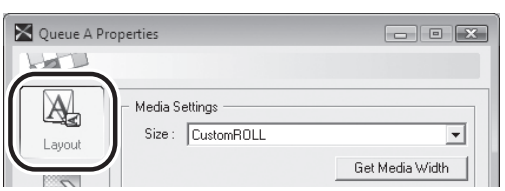
Click .



In [Operation Mode], select "Print Only."

Turn on the [Return to Origin After Print] option.

When You Want to Display the Side Opposite the Printed Surface

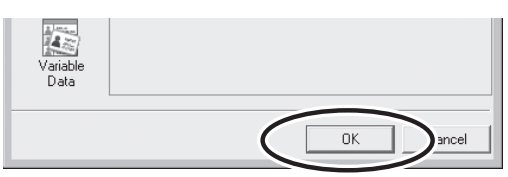


Click .

Turn on the [Mirror] option.
When the printing data with mirror image is prepared beforehand, you do not need to turn on this option.

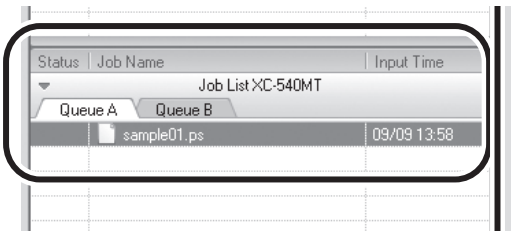
NOTE: This section only described the settings that are necessary for the use of the metallic silver ink. For other settings, refer to the online help provided for VersaWorks.

❼



Click [OK] to close the "Queue A Properties" window.

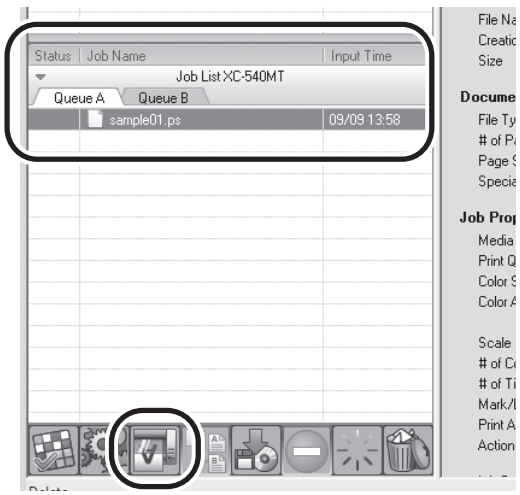
❽



Go to "Job List" and click the "Queue A" tab, and drag the printing data to the queue A job list.

The contents of the data are displayed in the preview window, and the layout on the media is displayed in the layout window.

❾



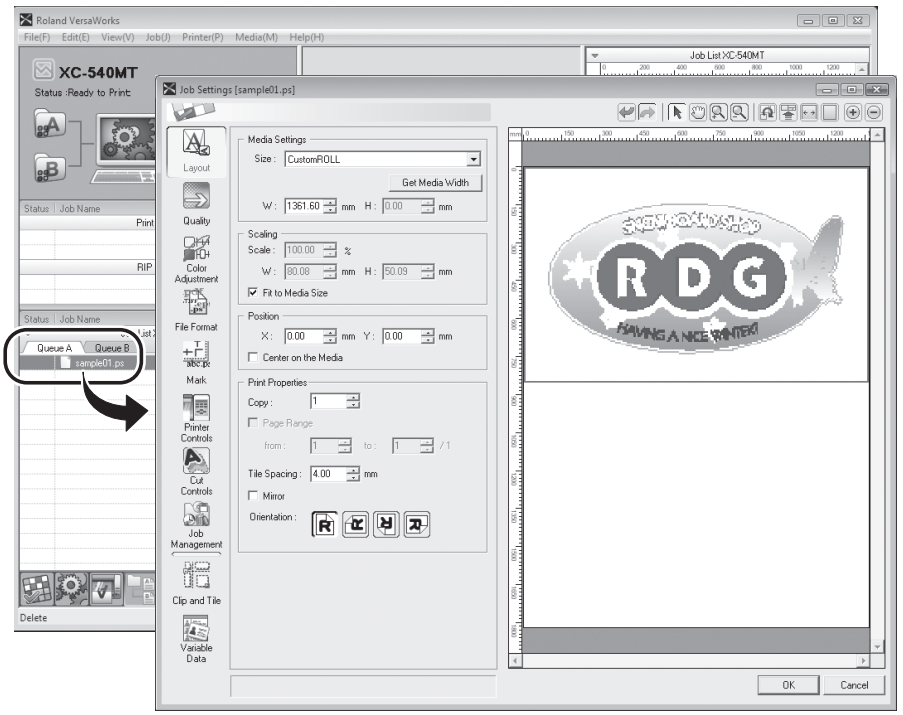
Select the print job in the job list, then click .

Printing will be started.

After printing and dry time, the media is pulled back. Then, print the white areas.

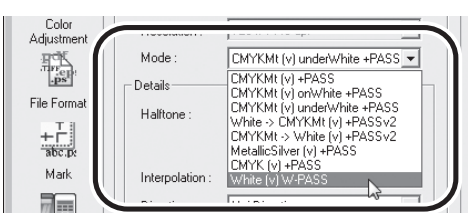
2. Printing With White Ink Only

❶ **Double-click the print job that was used in the step *1*.**
The "Job Setting" window appears.



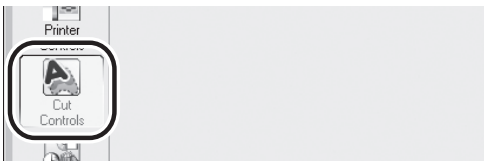
❷

Click .



With [Mode], select the print mode "White (v) +xxx."
This prints with RDG_WHITE only.
* "xxx" indicates "W-PASS" and others.

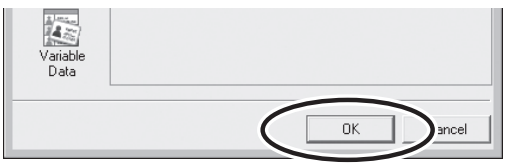
❸



Click .

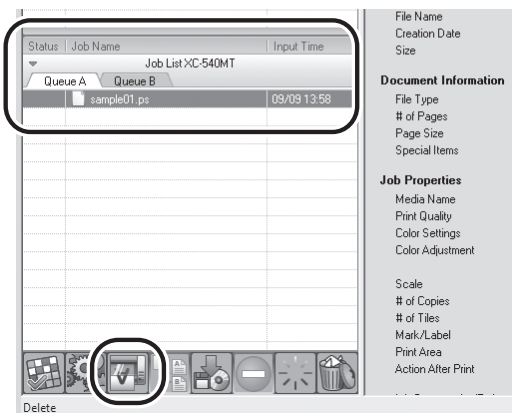
Turn off the [Return to Origin After Print] option.

❹



Click [OK] to close the "Job Setting" window.

❺



Select the print job in the job list, then click .
Printing will be started.

Tips!

After printing, allow the ink to dry sufficiently. We strongly recommend performing lamination.

Tips!

When continuing printing using another data that uses metallic silver, white, and CMYK colors, repeat steps on and after *1.*-❼. Also, if you want to modify detailed settings for each job, it will be convenient to perform modifications in the "Job Setting" window (displayed by double-clicking the print job in the job list).

Printing With Metallic Silver/White/CMYK Color in a Single Pass

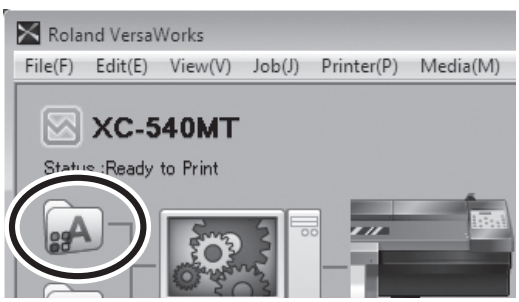
This section describes how to perform single-pass printing using metallic silver ink, white ink, and CMYK color ink. Printing is performed in a single pass, but you vary the printing settings depending on which of white ink or all the other inks (metallic silver and CMYK colors) is used as the undercoat.
The printing data containing metallic colors such as "RDG_MetallicSilver" and "RVW-MT-Bronze" must be used in order to use the metallic silver ink, and the printing data containing "RDG_WHITE" must be used in order to use the white ink.

☞ P. 9, "Creating Printing Data

Procedure

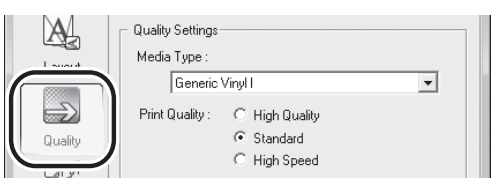
❶ **Make sure that you have finished making the preparations for VersaWorks, creating the printing data, and getting the printer ready (☞ page 7, "Chapter 2 Getting Ready").**

❷

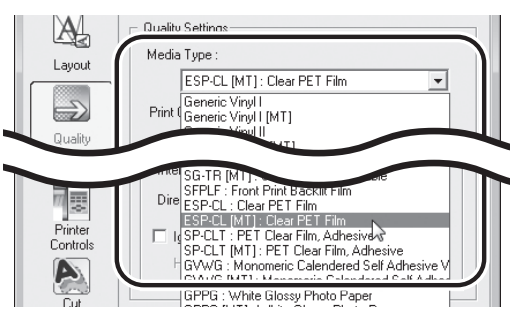


Double-click .
"Queue A Properties" window appears.

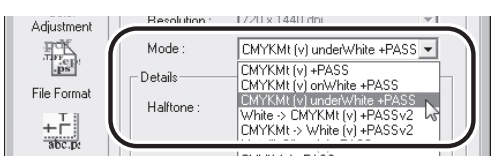
❸



Click .


Layout
Quality
Printer Controls
Cut
Media Type :
ESP-CL [MT] : Clear PET Film
Generic Vinyl I
Generic Vinyl I [MT]
SG-TR [MT]
SFPLF : Front Print Backlit Film
ESP-CL : Clear PET Film
ESP-CL [MT] : Clear PET Film
SP-CLT : PET Clear Film, Adhesive
SP-CLT [MT] : PET Clear Film, Adhesive
GVWG : Monomeric Calendered Self Adhesive V
GPPG : White Glossy Photo Paper

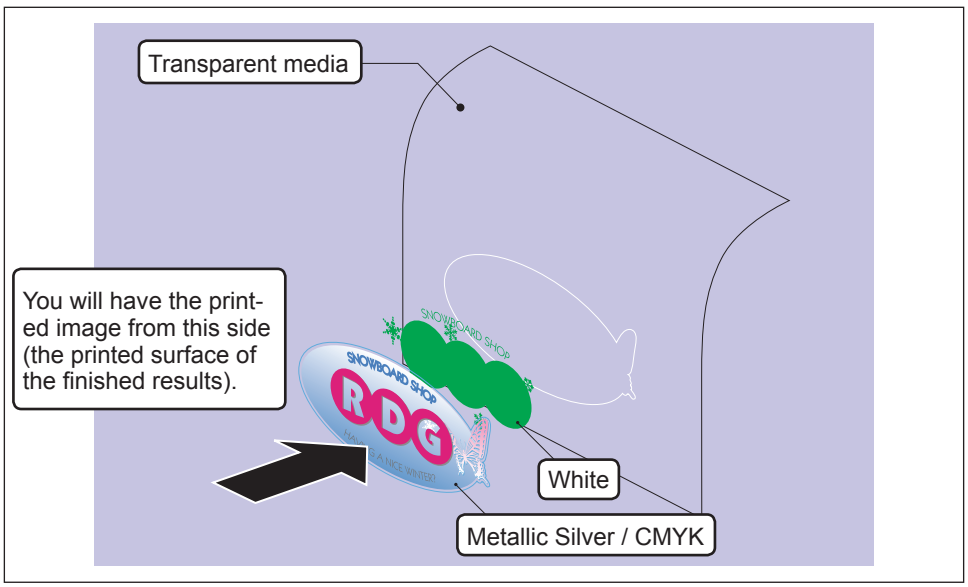
For [Media Type], select "xxx[MT]: Clear Film" or "xxx[MT]: Clear Film, Adhesive."
* "xxx" indicates "ESP-CL" and others.



With [Mode], select the print mode.
White -> CMYKMt (v) +xxx
Inks are overprinted in the sequence of white and then metallic silver/CMYK Color.
CMYKMt (v) -> White +xxx
Inks are overprinted in the sequence of metallic silver/CMYK Color and then white.
* "xxx" indicates "+PASSv2" and others.

Image of overprinting in the sequence of white and then metallic silver/CMYK

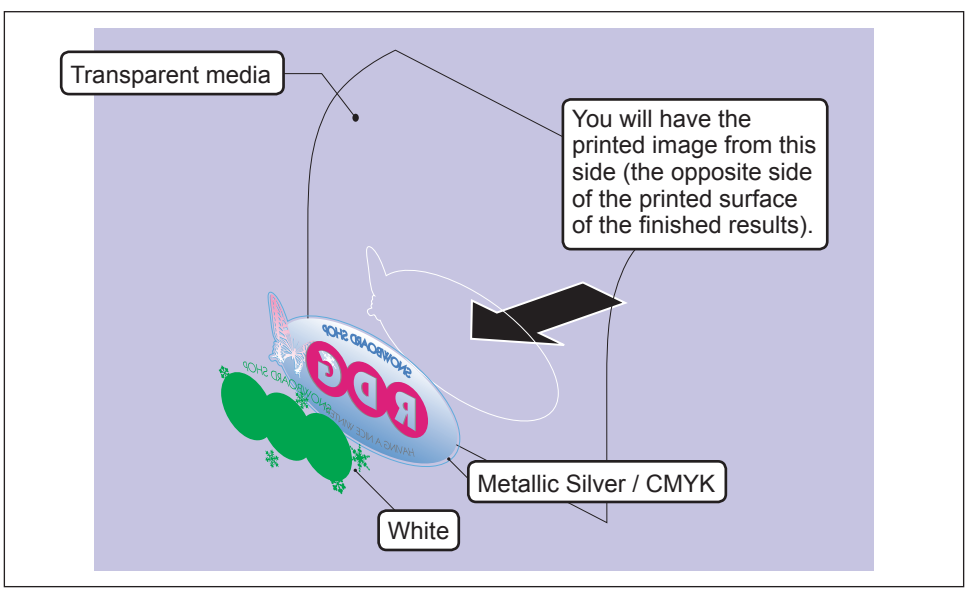
(Print Mode "White -> CMYKMt (v) +xxx")


Transparent media
You will have the printed image from this side (the printed surface of the finished results).
White
Metallic Silver / CMYK

Note: The white data and the metallic silver/CMYK color data are printed simultaneously, but are shown here as separate layers in order to indicate the printing sequence.

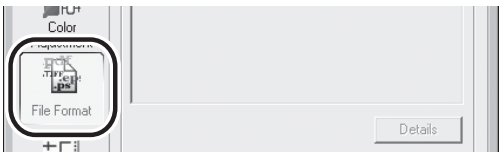
Image of overprinting in the sequence of metallic silver/CMYK and then white

(Print Mode "CMYKMt (v) -> White +xxx")


Transparent media
You will have the printed image from this side (the opposite side of the printed surface of the finished results).
Metallic Silver / CMYK
White

Note: The white data and the metallic silver/CMYK color data are printed simultaneously, but are shown here as separate layers in order to indicate the printing sequence.

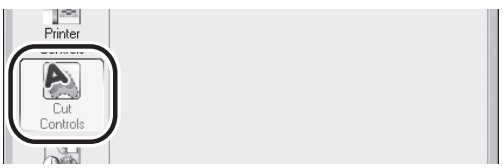
❹



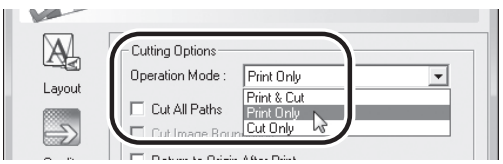
Click .

Turn on the [Convert Spot Color] option.

❺



Click .

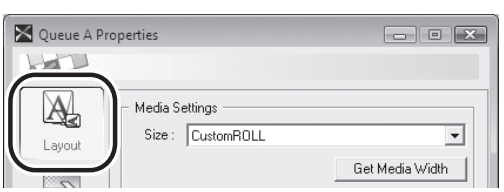


In [Operation Mode], select "Print Only."

Turn off the [Return to Origin After Print] option.

Because the metallic silver ink and white ink are difficult to dry, make the setting to prevent the media from being returned to origin immediately after the printing.

When You Want to Display the Side Opposite the Printed Surface by Using Clear Film.



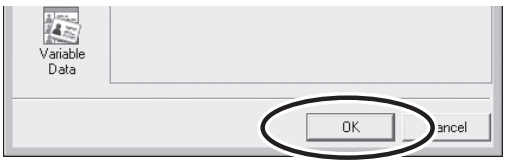
Click .

Turn on the [Mirror] option.

When the printing data with mirror image is prepared beforehand, you do not need to turn on this option.

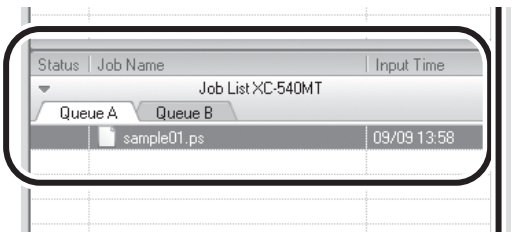
NOTE: This section only described the settings that are necessary for the use of the metallic silver ink and white ink. For other settings, refer to the online help provided for VersaWorks.

❻



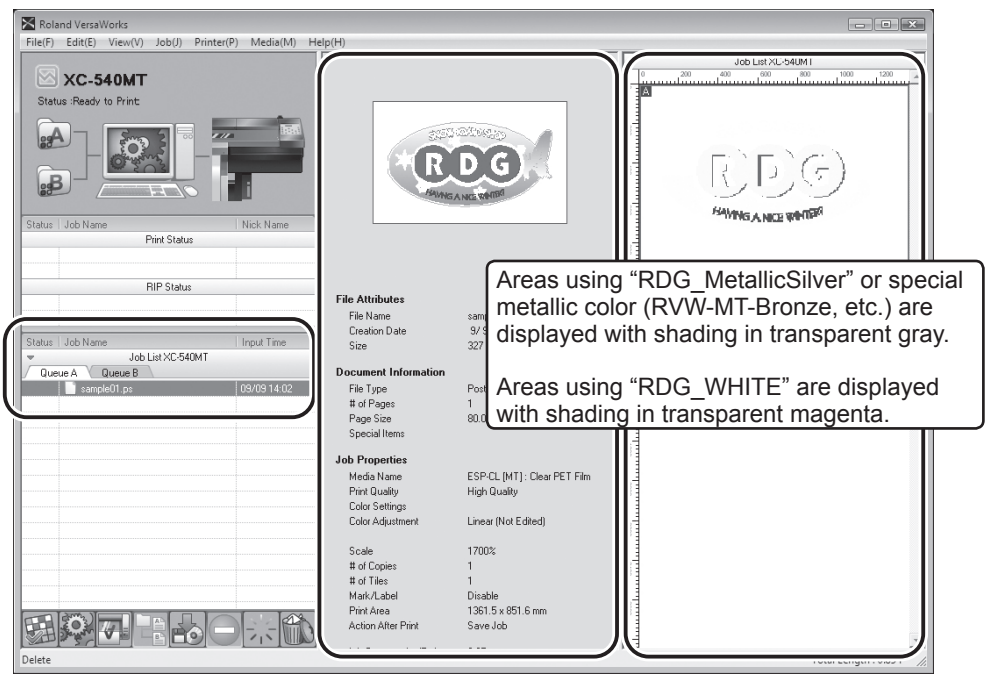
Click [OK] to close the "Queue A Properties" window.

❼



Go to "Job List" and click the "Queue A" tab, and drag the printing data to the queue A job list.

The contents of the data are displayed in the preview window, and the layout on the media is displayed in the layout window.



❽

Select the print job in the job list, then click .

Printing will be started.

Tips!

After printing, allow the ink to dry sufficiently. We strongly recommend performing lamination.

Tips!

When continuing printing using similar data (single-pass printing of white, metallic silver, and CMYK colors), repeat steps ❼ and ❽. Also, if you want to modify detailed settings for each job, it will be convenient to perform modifications in the "Job Setting" window (displayed by double-clicking the print job in the job list).

Chapter 4 Maintenance and Important Notice When Printing

4-1 Maintenance 40
Message for Ink Circulation 40
When Dot Drop-out Etc. Cannot be Corrected 40
4-2 Important Notes on Printing 42
When Performing Dual-pass Printing 42
When Using Transparent Media 43

4-1 Maintenance

Message for Ink Circulation

With this machine, white ink and metallic silver ink are circulated periodically to prevent the ink precipitation. When the following message appears, please wait until the display changes.
[CIRCULATING INK]

In order to allow the automatic maintenance such as above to be performed, please observe the items below.

- Leave the main power on at all times.
- Never leave the front cover open for long periods.
- After finishing making the settings for the various menu items, go back to the top screen.

When Dot Drop-out Etc. Cannot be Corrected

When using metallic silver ink and white ink, incorrect ink discharge, such as generation of dot drop-out, may occur even after cleaning is performed using the cleaning function or cleaning kit. This is due to the properties of metallic silver ink and white ink that ingredients tend to settle and separate, causing the precipitated ingredients to solidify after the machine is left unattended for a long period. In such cases, perform the operation described below. This operation requires two cleaning cartridges.

IMPORTANT!

A large amount of ink will be discharged during this operation. Perform this operation only when dot drop-out and other issues cannot be corrected even after performing cleaning using the cleaning function (Normal, Medium, Powerful) or cleaning kit. For how to perform cleaning using the cleaning function or cleaning kit, refer to the XC-540/XC-540MT User's Manual.

Procedure

❶ MENU ◀▲▼
INK RENEWAL ↵

Press MENU **.**
Press ▲ **several times.**

❷ EMPTY
DRAIN BOTTLE ↵

Press ENTER **.**
Discard the discharged fluid and attach the emptied bottle.

❸

REMOVE CARTRIDGE
1 2 3 4 5 6 7 8 9 10

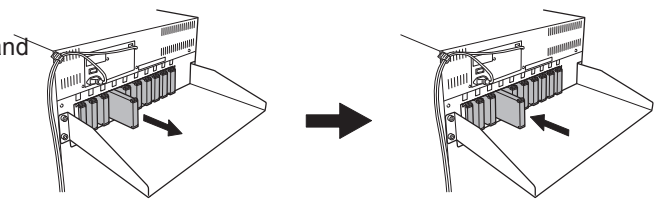
Number 4 and 5 flashes.

SET CARTRIDGE
1 2 3 4 5 6 7 8 9 10

Number 4 and 5 flashes.

RENEWING INK . . .
››››››

Press ENTER.
① Remove the ink cartridges from slots 4 and 5.
② Insert SOL INK cleaning cartridges into slots 4 and 5.



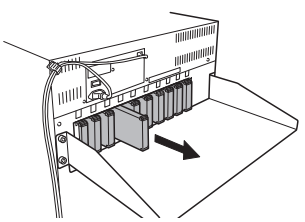
❹

REMOVE CL-LIQUID
1 2 3 4 5 6 7 8 9 10

Number 4 and 5 flashes.

RENEWING INK . . .
››››››››››

Remove the SOL INK cleaning cartridges from slots 4 and 5.
Carry out steps ❸ and ❹ as many times as indicated by the on-screen messages.



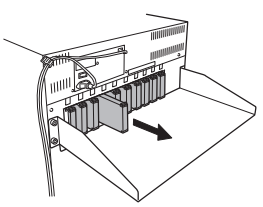
❺

SET CARTRIDGE
1 2 3 4 5 6 7 8 9 10

Number 4 and 5 flashes.

RENEWING INK . . .
››››››››››››››››

Insert the ink cartridges into slots 4 and 5.



❻

W 736mm
SETUP SHEET
◆▶ROLL

Press MENU.
Press ◄ to go back to the original screen.

4-2 Important Notes on Printing

When Performing Dual-pass Printing

What is Dual-Pass Printing?

Dual-pass printing refers to a printing method in which the white-ink (or metallic silver ink) undercoat is printed first, and then CMYK color is printed on top of white ink (or vice versa); in the process, the already printed media is pulled back to the original position once, and then overprinting is performed.

Allow the ink to dry thoroughly.

- Dry the ink sufficiently before you perform dual-pass printing with the next color. Performing dual-pass printing before the ink has dried enough may make attractive printing impossible or cause problems such as reduced weatherability.
- Drying time differs according to various conditions, but as a general guide you should use an auxiliary drying unit (DU-540) and also allow the media to stand for an additional 15 minutes.
- In particular, when you're dual-pass printing a white or metallic silver undercoat with CMYK inks, allow the undercoat to dry thoroughly before you overprint it. If the undercoat is not dry enough, differences in dryness may cause variations in the overprinted CMYK colors.

Using the middle pinch rollers

- The middle pinch rollers may smudge the printed surface when the media is pulled back. When you perform dual-pass printing, we recommend securing the media in place using only two pinch rollers (one on the left and one on the right).

Never use the media take-up system

- Performing dual-pass printing requires pulling the media back, and so the take-up unit cannot be used.

When Using Transparent Media

Loading transparent media

- Set the [EDGE DETECTION] menu item to "DISABLE". Transparent media cannot be loaded unless this setting is made.
- Ensure a margin of at least 75 mm from the leading edge of the media to the printing- or cutting-start location.

Important notes on the amount of media remaining

- When you use transparent media, the presence of media cannot be detected. In such cases, printing operation does not stop when the media runs out, and there is a chance that the platen or the like may become soiled by ink or that ink may get inside and damage the machine.
- If media runs out while printing is in progress, immediately press (PAUSE) to quit printing.

Using the middle pinch rollers

- The middle pinch rollers damage media slightly, and on transparent media this damage can be very noticeable. If such damage is a concern, we recommend securing the media in place using only two pinch rollers (one on the left and one on the right).

Automatic crop-mark detection

- Automatic crop-mark detection may not be possible for some media, such as transparent media. In such cases, perform alignment manually.

Roland

1000006485

R1-090918